Infrastructure and Environment

Subject: [External Sender] Re: My comments for 2025.IE24.11 on September 26, 2025 Infrastructure and Environment Committee

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From: Louise Hidinger <louisefoong@gmail.com>
Sent: September 26, 2025 10:22 AM
To: Infrastructure and Environment <iec@toronto.ca>
Subject: [External Sender] Re: My comments for 2025.IE24.11 on September 26, 2025 Infrastructure and Environment Committee

To the City of Toronto's Infrastructure & Environment Committee and the Environment, Climate & Forestry Division;

I am a member of the Cliffcrest and Bendale Butterflyway groups, part of the David Suzuki Foundation's Butterflyway Project, which aims to grow habitat for pollinators with native plants in neighbourhoods across Canada. I am also a member of Clean Indoor Air Toronto and one of our areas of concern is pollution from climate change-related events and human activity.

This summer, the Bendale Butterflyway group created a rain garden with native plants at Knob Hill Park in Scarborough. In just a few months, it has grown incredibly well and it attracts a wide variety of insects and birds. We believe rain gardens planted with native plants are an excellent strategy to manage storm water runoff, that also help to rebuild habitat and promote biodiversity in the city.

We strongly support the concept of green infrastructure to manage storm water. However, there are some issues which raise the following questions:

1) When water runs over hard surfaces, it picks up pollutants from the urban environment, including oils, heavy metals, microplastics, PFAS (per- and polyfluoroalkyl substances), and other synthetic chemicals. Although there is a ban on cosmetic pesticide use, pyrethrins and pyrethroids can still be used for pest control. Recently, companies have begun selling mosquito pesticide spraying services to property owners. This typically involves using a gas-powered fogging machine to fog the area with permethrin or another pyrethroid. This contaminates the air, water, and soil; pyrethroids are highly toxic to insects and aquatic wildlife. If a property owner has this spraying done, and it rains, then this pesticide will enter the water. If there's a rain garden being used to collect this runoff, it could potentially concentrate there along with all the other pollutants mentioned. This could be very harmful to any of the insects and other wildlife that would be drawn to the rain garden. We would like to know if there is consideration of means to mitigate or filter out pollutants in storm water runoff, to prevent it from concentrating in place.

2) The proposed green infrastructure includes soakaway pits that will be lined with geotextile fabric. As geotextile fabrics are typically made from plastics, we are wondering what type of geotextile fabric will be used, and is there a strategy in place to contain any microplastics or chemical leachate that a synthetic non-woven textile could release into the environment? We would like to know if there is consideration of a sustainable, environmentally friendly long-term option for the proposed soakaway pits.

3) Heavy rains generate enormous amounts of pollution, not just with polluted water, but also by kicking up large amounts of dust, mould, viruses, and bacteria from the ground and the water. All of this can form air pollution, either as aerosols formed during rain or after drying, as contaminated dust that goes into the air when disturbed (1,2). Rain also promotes mould growth and exposure to high concentrations of mould spores in the air can cause respiratory issues (2). We are wondering if the design of the proposed green infrastructure contemplates the formation of harmful airborne pollutants during and following heavy rains, and includes means to mitigate the formation of aerosols from storm water collection sites, and to protect people living nearby from exposure to these pollutants.

We hope that the Environment, Climate & Forestry Division will consider these issues and ensure that the proposed green infrastructure provides a long-term, sustainable solution for managing storm water, while protecting the health of the city's residents and its wildlife.

Yours sincerely,

Louise Hidinger, Ph.D.

On behalf of:

Cliffcrest Butterflyway,

Bendale Butterflyway, and

Clean Indoor Air Toronto

Selected references:

1. Chu J. Rainfall can release aerosols, study finds. MIT News. Published January 14, 2015. Accessed September 26, 2025. https://news.mit.edu/2015/rainfall-can-release-aerosols-0114

2. Azimi P, Allen J. Respiratory health harms often follow flooding: Taking these steps can help. Harvard Health Publishing, Harvard Medical School. Published November 9, 2022. Accessed September 26, 2025. https://www.health.harvard.edu/blog/respiratory-health-harms-often-follow-flooding-taking-these-steps-can-help-202211092848#:~:text=Buildings%20needn't%20be%20submerged,mold%20spores%20outdoors%20and%20indoors